

METHOD FOR REMOVING RINGING ARTIFACTS FROM LOCATIONS NEAR DOMINANT EDGES OF AN IMAGE RECONSTRUCTED AFTER COMPRESSION

ABSTRACT

A method to remove ringing artifacts from locations near dominant edges of an image reconstructed after compression. The image is decomposed into blocks small enough so that each would contain only one significant edge. A significant edge is tested as to whether it is a dominant edge of the image. If there is no dominant edge, the block is not processed. In the remaining blocks, the exact pixels that include the dominant edges are output without filtering. The direction of the dominant edges is inferred, and then the remaining pixels are filtered with a directional de-ringing filter. The de-ringing filter has a main direction that is perpendicular with the direction of the edge, and thus also with an inherent direction of the ringing artifacts.